

PERSONAL FINANCE MANAGER

Written by: JEFFREY GOLD  
Software Dimensions Inc.

In conjunction with Apple Computer, Inc.

## APPENDIX A - PUTTING THE PIECES TOGETHER

### NOTICE

Apple Computer Inc. reserves the right to make improvements in the product described in this manual at any time and without notice.

### DISCLAIMER OF ALL WARRANTIES AND LIABILITY

APPLE COMPUTER INC. MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS MANUAL OR WITH RESPECT TO THE SOFTWARE DESCRIBED IN THIS MANUAL, ITS QUALITY, PERFORMANCE, MERCHANTABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE. APPLE COMPUTER INC. SOFTWARE IS SOLD OR LICENSED "AS IS." THE ENTIRE RISK AS TO ITS QUALITY AND PERFORMANCE IS WITH THE BUYER. SHOULD THE PROGRAMS PROVE DEFECTIVE FOLLOWING THEIR PURCHASE, THE BUYER (AND NOT APPLE COMPUTER INC., ITS DISTRIBUTOR, OR ITS RETAILER) ASSUMES THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR, OR CORRECTION, AND ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. IN NO EVENT WILL APPLE COMPUTER INC. BE LIABLE FOR DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT IN THE SOFTWARE, EVEN IF APPLE COMPUTER INC. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF IMPLIED WARRANTIES OR LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

This manual is copyrighted. All rights are reserved. This document may not, in whole or part, be copied, photocopied, reproduced, translated or reduced to any electronic medium or machine readable form without prior consent, in writing, from Apple Computer Inc.

1980 by APPLE COMPUTER INC.  
10260 Bandley Drive  
Cupertino, California 95014  
(408) 996-1010

The word APPLE and the Apple logo are registered trademarks of APPLE COMPUTER INC.

Special Delivery Software is a trademark of Apple Computer, Inc.

Here are the steps to follow to put your system together:

- (1) To set up your Apple II, follow the instructions in the Apple II BASIC Programming Manual. You may not need to attach the Game Controllers, although there is no harm in doing so. Your Apple II must have at least the minimum amount of memory listed under the equipment description for you to use the Personal Finance Manager.
- (2) If you already have a Disk Operating System, and are using a version of DOS that runs in 13 sectors (DOS 3.2.1 or earlier), you will need to change two PROMs on your disk controller card to update your system to 16 sectors. Any version of DOS earlier than release 3.3 will need to be updated. These PROMs are also the same 16 sector PROMs that come with the Pascal Language System. Consult a DOS 3.3 manual for these procedures.

## APPENDIX A - SETTING UP THE APPLE II SYSTEM

This appendix includes a list of the equipment you'll need to use the Personal Finance Manager programs on your Apple II. You do not need to read all the manuals, but they should be on hand to answer questions that may arise in operating the equipment (e.g., how to boot a diskette).

In order to be able to provide Special Delivery Software at a lower cost, the diskettes have been copy protected. This software requires an Autostart ROM, and that the Autostart ROM is the only monitor ROM in the system. Thus, this software will not run if there is a non-Autostart ROM on either the mother board or on any firmware card located in slot #0.

The Personal Finance Manager is written in Applesoft BASIC and assembly language. To use it, you'll need the following equipment:

- an Apple II Plus with 48K bytes RAM; or
- an Apple II with 48K bytes RAM and an Applesoft firmware card; or
- an Apple II with the Language System.

Plus:

- an Apple Disk II with Controller (16-Sector PROMs);
- a Video Monitor or Television.

For reference, you should have on hand a copy of the following manuals:

- This Manual (A User's Guide to the Personal Finance Manager);
- Apple II BASIC Programming Manual (Setting up the Apple II);
- DOS Manual (How to Boot the Diskettes).

## PERSONAL FINANCE MANAGER

### TABLE OF CONTENTS:

1	INTRODUCTION
2	REQUIREMENTS
3	WORDS OF ADVICE
4	DEFINITIONS
12	RUNNING THE PROGRAM
14	MAIN MENU
15	KEYBOARD FUNCTIONS / PRINTER CONTROL
	PROGRAM FUNCTIONS:
16	ENTER DATA
19	SEARCH/SORT DATA
23	DATA EDIT MODE
25	RECONCILE CHECKBOOK STATEMENT
29	BUDGET CATEGORY DEFINITION
32	BUDGET CATEGORY SUMMARY
36	CREDIT ACCOUNT DEFINITION
39	CREDIT ACCOUNT SUMMARY
42	STATUS REPORT
43	INITIALIZATION
47	QUIT
48	PROTECTING YOUR DATA
50	BEGINNING A NEW YEAR
52	PROGRAM ERROR MESSAGES
	APPENDIX A:
54	SETTING UP THE APPLE II SYSTEM
55	PUTTING THE PIECES TOGETHER

**PROGRAM ERROR MESSAGES (con't)**

**WRONG DISKETTE LOADED IN DRIVE**

**WHEN READY, PRESS ANY KEY TO CONTINUE**

If the user removes the Personal Finance Manager diskette and replaces it with another diskette, this error message will appear. To recover from the error, reload the Personal Finance Manager diskette and then press any key.

**PROGRAM INTERRUPTED BY RESET OR CTRL-C**

**WHEN READY, PRESS ANY KEY TO CONTINUE**

This message indicates that the user has interrupted the Personal Finance Manager by pressing the RESET key or by pressing control-C. The program will attempt to recover from this condition by returning to the main menu. The user is again advised never to press the RESET key when using the Personal Finance Manager.

**APPLESOFT ERROR <error code> ENCOUNTERED**

**WHEN READY, PRESS ANY KEY TO CONTINUE**

This message indicates that the Personal Finance Manager has encountered an Applesoft error. The error code is displayed in the angled brackets ( <> ), and a full explanation of the error can be found in pages 115-117 of the Applesoft II BASIC manual. The program will attempt to recover from this error condition by returning to the main menu.

## PROGRAM ERROR MESSAGES

Most Personal Finance Manager error messages encountered during normal use of the program were described in the various program function sections of this manual. The following is a discussion of certain additional program error messages:

### NO ROOM ON DISK TO CREATE FILE

This error occurs if the program cannot create the financial data file. This error indicates that the Personal Finance Manager diskette is damaged or the user has added an additional program and/or files to the diskette.

### PROGRAM NOT FOUND: <program name>

This indicates that one of the programs that make up the Personal Finance Manager has been deleted from the diskette.

### CANNOT SAVE ENTRY, NO ROOM IN <month>

This error message appears when the user attempts to add a financial entry to a month that already has the maximum number of entries. The user is referred to the program STATUS REPORT option to determine the amount of space available in each month.

### YES OR NO ANSWER REQUIRED

This error is reported if the user doesn't answer 'YES' or 'NO' (or 'Y' or 'N') to a prompt requiring a yes or no answer. The program will not continue until the user properly answers the question.

### DISK DRIVE OR READ ERROR WHEN READY, PRESS ANY KEY TO CONTINUE

A disk drive error has been detected by the program (i.e., drive door is open). The user should remove the diskette and then insert it back in the drive and press any key. The program will then attempt a retry on the disk operation (read or write) that caused the error.

### DISKETTE IS WRITE PROTECTED WHEN READY, PRESS ANY KEY TO CONTINUE

The Personal Finance Manager diskette must not be write protected. If this error message appears, the user should remove the write protect tab from the diskette and then press any key to allow the program to continue.

## INTRODUCTION

The Personal Finance Manager is a family budget management program designed specifically for owners of APPLE II computers. This program has been structured to make the personal computer an integral part of the planning and analysis of family spending. With this program, a family will be able to keep better records of expenditures, analyze their spending patterns, simplify the task of maintaining tax records, and validate bank checkbook statements. The design goal for this program was to provide the users with the capability to manage the family budget, while at the same time being an easy-to-use (friendly) program that any member of the household could operate.

The following is a list of some of the specific features provided by the Personal Finance Manager:

1. Ample storage capacity for a full years worth of family financial records on a single diskette, 200 entries per month for 12 months
2. Detailed records of all check transactions, deposits, cash expenditures, and credit card expenditures
3. Ability to define and modify 24 budget categories to be used for accurate accounting of expenditures
4. Ability to classify expenditures as being tax deductible
5. Both month-to-date and year-to-date expenditure summaries
6. Comparisons between actual spending habits and monthly budget amounts defined by the user
7. Graphical display of budget category activity
8. Ability to define and modify 12 Credit Card accounts
9. Simple, easy-to-use data entry
10. Comprehensive data search/sort modes
11. Extensive editing features that allow improperly entered data to be easily modified
12. Checkbook balancing mode for reconciliation with your monthly checking account statement
13. Provisions for beginning record keeping for a new year
14. Unique printer output mode provided

## REQUIREMENTS

The following are the minimum hardware requirements for running the Personal Finance Manager:

- o APPLE II PLUS  
or APPLE II with Applesoft Firmware Card  
or APPLE II with Language System
- o 48K bytes of RAM memory
- o DISK II Subsystem (running DOS 3.3, using 16 sector PROMs)

This manual assumes that your Apple II system is correctly set up. If you're not sure that the system is ready to go, see Appendix A.

The use of a diskette for data storage (and thus the requirement for the disk subsystem) is what separates the Personal Finance Manager from simple checkbook balancing programs. A program that is to manage a years worth of personal financial records in an easy-to-use manner must have all the data readily available. A non-diskette based system could not provide enough storage room or fast enough response time to be acceptable for daily use. The Personal Finance Manager uses approximately 70,000 bytes on a diskette to store a family's financial data for a full year. This large data storage capacity enables the program to be able to quickly access any expenditure record for the current year.

APPLE II systems equipped with printers are supported by the Personal Finance Manager. Using a single keystroke, any program output displayed on the Apple's TV video screen can be listed on the printer. Thus, a user can be selective in choosing when and what Personal Finance Manager outputs are to be printed. Page 14 of this manual provides instructions on how to invoke this unique printer feature.

## BEGINNING A NEW YEAR (con't)

Once you have started a new year, the ending year's data is only available on your permanent backup copy. Should you need to access any of the previous year's data, the only method available is to use the procedures described in PROTECTING YOUR DATA to restore the needed data to the diskette. Of course, remember to save and then restore your current year's data before attempting to access any previous year's data.

## BEGINNING A NEW YEAR

The Personal Finance Manager has sufficient capabilities to allow the user to simplify the process of beginning record keeping for a new year. The following summarizes the general steps to be taken at years end to prepare for the new year:

1. Complete entry of data for the ending year.
2. Generate any data listing and summaries of the ending year's data that may be frequently required (e.g., listing for tax purposes, etc.).
3. Create a permanent backup copy of the ending year's financial file, use the procedures described in the previous section (PROTECTING YOUR DATA).
4. Label the ending years backup copy (e.g., 1980 RECORDS) and save it in a safe place.
5. Use the Personal Finance Manager's Year End Reset function to initialize the financial data file for the new year.
6. Make any changes desired to the budget category and credit account definitions and financial file name.
7. Begin entering the new year's data on the diskette.

The only possible problem that may occur is in step #5, where the program may report that there is insufficient room to save all currently unreconciled checks and deposits. If you are not using the reconciliation features of the Personal Finance Manager then the message can be ignored and the Year End Reset function continued. Otherwise, the message indicates that the program will be unable to transfer all required entries to perform reconciliation in the new year. This message could be a reminder that the final (i.e., December) reconciliation has not been done on the ending year's data. In this case, simply perform the reconciliation and retry the Year End Reset function. Otherwise, there really are too many unreconciled entries to be carried over into the new year (a highly unlikely circumstance since 200 'Prior Year' entries are available). This situation is best handled by letting the Year End Reset function transfer as many unreconciled entries as possible. Then the first (i.e., January) new year reconciliation will have to be done using both the Personal Finance Manager's reconciliation mode, and the old standard pencil and paper reconciliation techniques.

## WORDS OF ADVICE

In order to get the most satisfaction and utility from the Personal Finance Manager, the user is advised of the following:

- o Take plenty of time to carefully read this entire manual. The only way to take full advantage of the Personal Finance Manager is to have a full understanding of its concepts and features.
- o To help in the familiarization, it is recommended that the Personal Finance Manager program be up and running while you are reading this manual. This will allow you to actually use, and become familiar with, the many features as they are described.
- o Even though this program has been designed to help prevent loss of data in case of accidental RESETs, the user is advised to never press the RESET key when using the Personal Finance Manager. One possible suggestion to those users in the habit of pressing the RESET key is to place an "O"-ring (such as Sears model #42-22517) over the stem of the RESET key. With this "O"-ring in place, the RESET key is basically disabled since it will require considerable pressure to press the key.

## DEFINITIONS

Before going into the details of running the Personal Finance Manager, it is important that users become familiar with certain words and phrases that are used in both this manual and in the program. The motivation for providing these definitions and descriptions, is to familiarize the user with terms and concepts employed by the Personal Finance Manager. This familiarization will allow a user to take full advantage of the many features provided by the program.

**BUDGET** - A budget is the allocation of financial resources (money) for a specific application. For example: A family may have a budget of \$200 for monthly food expenses. One goal of the Personal Finance Manager is to provide a family with the means of setting and monitoring financial budgets.

**BUDGET CATEGORY** - The Personal Finance Manager allows a family to define 24 financial budgets, called budget categories. Each budget category consists of the following items: the budget category name, the category ID, and the monthly budget amounts. The budget category name is a 20 character name that describes the budget function. Some examples are provided below:

FOOD AND GROCERIES  
HOUSING EXPENSES  
CAR INSURANCE  
MEDICAL/DRUGS

The budget ID is a two character identifier used in the data entry mode (described later) to assign an expenditure to a specific budget category. For example, the 'FOOD AND GROCERIES' budget category could be given the budget ID: 'FD'.

The monthly budget amounts define the amount of money the family is attempting to allocate to the budget category. The money may be allocated in one of two ways. The same amount may be budgeted for all 12 months (e.g., \$200 a month for food and groceries). Conversely, a budget category may be defined with differing amounts for each month (e.g., \$175 in March and August only, for car insurance).

The Personal Finance Manager automatically defines one of 24 budget categories, this special category is used for accounting credit card payments. The budget is named 'CREDIT CARD PAYMENTS' and its ID is 'CC'.

## PROTECTING YOUR DATA (con't)

When performing the copy process using FID, it is not difficult to get the source and destination diskettes mixed up. Be careful, such a confusion can have disastrous results. One piece of advice, temporarily 'write protect' the source diskette. This will insure that you don't accidentally copy the destination onto the source. When the copy is complete, remove the 'write protect' tab from the source diskette.

Should you have to restore a destroyed financial data file, the FID program is again used. In this situation, the source diskette is your most recent backup copy (it shouldn't be more than a week old). The destination diskette is the Personal Finance Manager diskette. Follow the same general instructions for creating your backup copies. When the copy is complete your financial data file will be restored to the same state it was in when you created the backup. Any data added after the backup was generated will have to be reentered into the file, but it sure beats having to reenter a whole year's worth of data.



## PROTECTING YOUR DATA

Imagine your dismay. It's near the end of the year and you are using the Personal Finance Manager to update your financial records. You boot the diskette and the program shocks you by outputting the following message:

**FINANCIAL DATA FILE HAS BEEN  
DESTROYED OR OVERWRITTEN !!**

What to do now ???

This catastrophe could be the result of a mis-handled diskette (wow, how did all those fingerprints get on the diskette?), a damaged disk drive, etc. While there is no way to guarantee that this type of disaster doesn't happen to you, it is possible to lessen its severity should it occur. What I suggest is a bit of insurance in the form of a backup copy of your financial data file. This is accomplished by getting into the habit of regularly copying the contents of the Personal Finance Manager's financial data file onto another diskette. Performing this backup operation on a weekly basis and saving the backup copy in a safe place (however, remember where you have placed it) is time well spent. Then should you have the misfortune of finding your financial data file destroyed, you can relax in the knowledge that all is not lost. By restoring your backup copy, you can recover all but the most recently entered data.

The following are general instructions for creating a backup copy of the financial data file using Apple's File Developer program (FID).

1. Boot the APPLE DOS 3.3 Master Diskette
2. Type: BRUN FID
3. Select option <1> (COPY FILES)
4. Respond to the disk drive and slot number prompts
5. When prompted for file name, enter: PFM.DATAPILE
6. FID will then prompt you to load the diskettes. FID will allow you to perform a copy on systems having either one or two drives. When performing the copy, remember which diskette is the source and which is the destination:

Source diskette: Personal Finance Manager  
Destination diskette: The backup diskette

When the copy procedure is complete, remove the backup diskette, label it with the current date, and store it in a safe place.

## DEFINITIONS (con't)

**EXPENDITURE** - for purposes of this program, an expenditure is the spending of money either in the form of a check, cash or credit card. These expenditures types are defined in more detail below:

**CHECKS** - The Personal Finance Manager recognizes one type of expenditure as being the writing of checks. A check is identified by its check number, which may be in the range from 1 to 9999. The check numbers serve to correlate check entries in the Personal Finance Manager, to entries in a family's checkbook register. It is not necessary that check numbers be entered in numerical order or that they be unique. For example, a single check written to a department store for both books and clothing may be entered twice into the program. This allows the user to accurately assign expenditures to the proper budget categories. When splitting a check into several entries, it is important that the sum of the amounts for all entries using the same check number add up to the exact amount of the one check written. Failure to do this will result in errors in the program's checking account balance.

**CASH** - The second type of expenditure recognized by the Personal Finance Manager is cash. All expenditures paid with cash (i.e., paper and coin money) are included in this expenditure type.

**CREDIT CARDS** - The third type of expenditure recognized by the Personal Finance Manager is that of credit cards. These expenditures consist of money spent in the form of any of the predefined credit card accounts. No specific method is provided to handle either finance or carrying charges that are added to credit expenditures. However, these charges can be accounted for by simply making additional entries for the amount of the charges. Credit card accounts are identified by a 20 character name and a two character credit account ID (e.g. MC for Master Charge). The following two credit card accounts are automatically defined by the program:

VS --- VISA/BANKAMERICARD  
MC --- MASTER CHARGE

**DEPOSIT** - Deposits are monies added to a family's checking account. The Personal Finance Manager will keep track of all deposits made to the checking account and update the checking account balance accordingly.

## DEFINITIONS (con't)

**BALANCE** - The Personal Finance Manager monitors the current balance in the family's checking account. The balance will reflect the sum of all checks written, all deposits made, and additional bank service charges (if any).

When the Personal Finance Manager displays the current checking account balance, inverse video is used to highlight any negative balance.

**NOTATION** - All expenditure and deposit entries entered into the Personal Finance Manager may be augmented by a notation. The notation may be up to 14 characters long, and serves to describe and identify the entry. For example, a check entry may use the notation to indicate to whom the check was written.

**TAX DEDUCTIBLE** - For purposes of simplifying the task of organizing records for income taxes, the Personal Finance Manager allows a user to declare any check, cash, or credit card expenditure as being tax deductible. This capability, along with the data search/sort mode (described later), makes it a simple matter to review all tax deductible expenditures for income tax preparations.

The ability to flag an entry as being tax deductible is a feature that can be tailored to the users individual needs. For example, this feature could alternatively be used to flag all expenditures that have sales tax included.

**DATE** - Date entry (month & day) is required in many of the Personal Finance Manager inputs. Input of date includes month and day only (year is not required since the program maintains records for a single year only). The input is always in the form: month/year. The month may be entered as either the month number (i.e., June = 6) or the month name (only the first three characters are required). All the following examples are valid input formats for the 12th of April:

4/12    APR/12    APRI/12    APRIL/12

## QUIT

This menu selection is used to properly terminate the Personal Finance Manager. As was mentioned previously, it is important that the program always be terminated by using this menu selection. This guarantees that any data that was added or edited is properly updated on the diskette. When this selection is requested, the program will respond by closing the finance data file and outputting the following message:

PFM: GOODBYE ....

**IMPORTANT !!!** - Please do not exit the Personal Finance Manager by attempting to press the RESET key or by just turning off the power switch. Using either of these methods may result in the loss of valuable financial data.

## INITIALIZATION (con't)

### SET PRINTER SLOT:

This option provides for setting the printer slot to any available slot number with the exception of slot #6. If a card is installed in slot #1, then the program will default the slot number to 1, otherwise, the default is set to zero. The user may either select the default value (by just pressing RETURN) or may enter another slot number. It is important to note that a printer interface card must be in the slot assigned or an error message will be displayed. If a printer is not available, set the slot number to slot #0.

### CHANGE TODAY'S DATE:

This option provides a method of changing the default date without exiting the Personal Finance Manager system. The date is entered in the same format as that required for system start-up.

## DEFINITIONS (con't)

**DATA ENTRY MODE** - The data entry mode is used to add check, credit card, and cash expenditures; and deposits to the family's financial data file maintained on the diskette. The following lists itemize what information can be included for each type of entry. Note that those items marked with an asterisk (\*) are optional:

**CHECK EXPENDITURES:** Check number  
Date  
\* Notation  
Amount spent  
\* Tax deductible ?  
\* Budget category ID

**CASH EXPENDITURES:** Date  
\* Notation  
Amount spent  
\* Tax deductible ?  
\* Budget category ID

**CREDIT CARDS:** Credit Card Account ID  
Date  
\* Notation  
Amount spent  
\* Tax deductible ?  
\* Budget category ID

**DEPOSITS:** Date  
\* Notation  
Amount deposited

**DATA SEARCH/SORT MODE** - Either some or all of the previously entered financial entries may be reviewed using the Personal Finance Manager's data search/sort mode. This is a very flexible mode that allows a user to be selective in reviewing the family's financial data. The data search/sort mode provides a wide range of capabilities from a simple listing of all entries for the current month to a complex listing such as; all tax deductible entries for 'FD' in the month of March. A powerful sorting feature provides the user with the added capability of generating financial data entry listing that are sorted. The sorting may be done on any of the following data fields:

- o Check number
- o Date
- o Amount
- o Budget category ID

## DEFINITIONS (con't)

**DATA EDIT MODE** - The Personal Finance Manager provides two mechanisms for correcting improperly entered data. The first method allows errors to be corrected during the process of entering the data. This method uses special editing keys described in a later section of this manual. A second error correction method is the data edit mode, this editing method can be accessed from both the data entry and data search/sort modes. The data edit mode allows a user to edit any entry that is currently displayed. The only limitation is that the date of an entry cannot be altered such that the month changes. All other portions of an entry may be edited. Additionally, using the data edit mode, entire entries may be deleted from the financial data file.

**CHECKBOOK RECONCILIATION** - Checkbook reconciliation is the process of verifying the checking account statement received from the bank. The Personal Finance Manager provides a powerful yet easy to use reconciliation mode. This mode allows the user to account for all check transactions that appear on the bank statement, include any service fees charged by the bank, and to verify the current checking account balance. If an error in the balance is detected, the program will indicate the amount of error and leave it up to the user to uncover and correct the error (e.g., an incorrectly entered check amount).

**TRIAL RECONCILIATION** - In addition to the normal checkbook reconciliation process described above, the Personal Finance Manager provides a trial reconciliation mode. This mode allows the user to perform the checkbook reconciliation without having the results made permanent (i.e., the results are not posted to the diskette).

**MONTHLY EXPENDITURE TOTALS** - The Personal Finance Manager keeps track of the total expenditures spent in each month. These monthly totals are a summation of all checks, cash, and credit card expenditures in a month. However, these totals do not include checking account deposits or any expenditure assigned to the special 'CC' (Credit Card Payments) budget category.

## INITIALIZATION (con't)

The program will first determine the number of currently unreconciled checks and deposits. If this number exceeds 200, then the program will be unable to save all the unreconciled entries in the new year and the following message will be displayed:

**INSUFFICIENT SPACE TO ALL CURRENTLY  
UNRECONCILED CHECKS AND DEPOSITS...**

**OK TO CONTINUE ?**

A 'NO' (or 'N') response will return the user to the Initialization Menu without performing the Year End Reset function. Responding 'YES' (or 'Y') will continue the Year End Reset Function, however, only the first 200 unreconciled checks and/or deposits will be carried over into the new year.

Complete instructions for ending an old year and beginning record keeping for a new year can be found in the BEGINNING A NEW YEAR section of the manual. Upon completion of the Year End Reset function, the user is returned to the Initialization Menu.

**IMPORTANT !!!** - Similar to the full data initialization function, the Year End Reset function will erase data from the diskette that cannot be recovered. The user should be extremely careful when using this function.

### ASSIGN FILE NAME:

This option provides the ability to place a label on the Personal Finance Manager diskette. The name can be up to 22 characters in length. The program will prompt the user to enter the file name and will display the existing (default) file name. To change the name the user simply enters the new name followed by a RETURN. If no change is desired, simply press the RETURN and no change will occur. The assigned file name is displayed as part of the Personal Finance Manager's status report.

## INITIALIZATION (con't)

The program will erase all expenditure data, all budget category definitions, and all credit account definitions contained on the diskette. The program will automatically define two credit accounts:

VS - VISA/BANKAMERICARD

MC - MASTER CHARGE

and one budget category:

CC - CREDIT CARD PAYMENTS

The program will also assign the default financial file name:  
FAMILY RECORDS

The program will then prompt the user to enter the current checking account balance and the next check number. Once the initialization process is complete, the program will return to the initialization menu.

**IMPORTANT !!!** - Once a Personal Finance Manager diskette has been initialized, there is no way to restore all the data that was erased without re-entering it, so be careful when and how this function is used.

## YEAR END RESET:

This function is used at years end to begin record keeping for the new year. All currently defined budget categories and credit accounts will be maintained. However, the program will erase most of the ending years expenditure entries (e.g., checks, cash, deposits, etc.). Only those currently unreconciled checks and deposits will be carried over into the new year as 'Prior Year' entries to be used for reconciliation purposes.

The program will display the following prompt:

YEAR END RESET  
THIS PROCESS WILL ERASE ALL ENTRIES  
EXCEPT THOSE CURRENTLY UNRECONCILED  
CHECKS AND DEPOSITS  
OK TO CONTINUE ?

A 'YES' (or 'Y') response will cause the program to begin the Year End Reset function.

## DEFINITIONS (con't)

**BUDGET SUMMARY** - The Personal Finance Manager provides capabilities of monitoring how well the family is maintaining it's established budgets. The generated budget summaries provide sufficient information to enable the family to analyze its spending patterns. Three different types of summaries are provided:

Monthly summary - All categories in a specific month

Category summary - Specific category, all 12 months

Full year summary - Summation of all budgets, all year

In both the monthly and category summaries, the family is shown what percentage of total expenditures was actually spent on a budget category and what percentage of the budgeted amount was spent. For example, if a family budgeted \$200 for 'FOOD AND GROCERIES', and in a particular month \$1000 total was spent with \$300 being spent on food, the following summary data would be provided:

% OF TOTAL EXPENDITURES = 30% (= \$300/\$1000)

% OF BUDGETED AMOUNT = 150% (= \$300/\$200)

Additionally, a graphical presentation (LO-RES) of a specific category summary is available. This graphical summary indicates both the budgeted amount and the total budget expenditures. Color is used to highlight those months when the family has exceeded its budget.

**CREDIT ACCOUNT SUMMARY** - The Personal Finance Manager provides summary reports of credit card accounts. Two different credit account summaries are available. The monthly summary provides details of all credit accounts in a specific month. The specific credit summary details a single credit account in all 12 months. A LO-RES graphical presentation of a specific credit account summary is also available.

**YEAR-TO-DATE RESULTS** - Both the Budget Category and Credit Account summaries include monthly and year-to-date results. Monthly results are the results for a specific month (e.g., May). Year-to-date results are the summation of the results from the start of the year (January), through the specified month. For example, the year-to-date results for May are a summation of the results in January, February, March, April, and May.

## DEFINITIONS (con't)

**PRIOR YEAR ENTRY** - The Personal Finance Manager actually maintains financial data for 13 months. These include the 12 months of the year (i.e., January thru December), and a special pseudo month identified as 'Prior Year'. This special pseudo month is used to maintain unreconciled checks and deposits carried over from the previous year. 'Prior Year' entries are only used for reconciliation purposes and are not included in any of the Personal Finance Manager's budget category, credit account, or monthly expenditure summaries. Only the current checking account balance will reflect any change made to a 'Prior Year' entry.

A user cannot enter any data into the 'Prior Year' pseudo month. Only the Personal Finance Manager's Year End Reset function (described below) is responsible for transferring data into this special month. When displayed, a 'Prior Year' entry is identified by having its date in inverse video.

**FINANCIAL FILE NAME** - To provide a means of identifying the data maintained on a diskette, the Personal Finance Manager allows the user to assign a name to the data. This name can be up to 22 characters and is assigned using the program's initialization mode. An example of an assigned file name is: '1980 FAMILY RECORDS'.

**FULL DATA INITIALIZATION** - The Personal Finance Manager has a full data initialization mode that is used to clear (i.e., erase) all the financial data records maintained on the diskette by the Personal Finance Manager. A full data initialization will result in the following data file configuration:

- o Zero financial entries
- o One defined budget category: 'CREDIT CARD PAYMENTS'
- o Two credit card accounts: 'VISA' & 'MASTER CHARGE'
- o Default financial file name: 'FAMILY RECORDS'
- o User defined checking account balance
- o User defined next check number
- o Printer slot number set to 0

The user can request a full data initialization at any time. Since this initialization will destroy all financial data currently stored on a diskette, the user should be careful when and how the process is used. This financial data file initialization should not be confused with the Apple II DOS 'INIT' command.

## INITIALIZATION

This menu selection is used to request the financial data file initialization and program set up functions. The program will display the the following menu:

\*\*\*\*\* INITIALIZATION \*\*\*\*\*

### INITIALIZATION OPTIONS:

- <1> FULL DATA INITIALIZATION
- <2> YEAR END RESET
- <3> ASSIGN FILE NAME
- <4> SET PRINTER SLOT #
- <5> CHANGE TODAY'S DATE
- <R> RETURN TO MAIN MENU

### WHICH OPTION WOULD YOU LIKE ?

Only selections #1 (FULL DATA INITIALIZATION) and #2 (YEAR END RESET) will erase any data currently stored on the Personal Finance Manager diskette. The user enters the number (or letter) corresponding to the function desired followed by a RETURN. Any other response will cause an error message to be displayed. The program then proceeds in one of the following manners:

### FULL DATA INITIALIZATION:

This function is used to completely erase all financial data currently stored on the Personal Finance Manager diskette. The program will respond by prompting the user with the following query:

FULL DATA INITIALIZATION:  
THIS PROCESS WILL DESTROY ALL DATA  
CURRENTLY STORED ON THIS DISKETTE  
OK TO CONTINUE ?

If the user responds with a 'NO' (or 'N'), the program will return to the Initialization Menu without performing the initialization process.

If the user responds 'YES' (or 'Y'), then the financial data file initialization process will be started and the following message will be displayed:

PLEASE WAIT, INITIALIZATION IN PROCESS



## STATUS REPORT

This function enables the user to view the current status of the Personal Finance Managersystem and to determine how much of the available financial data file storage space has been used.

The program will generate a listing on the video display providing the following information:

- o The currently assigned file name
- o Today's date
- o Slot number assigned to the printer
- o Number of defined credit card accounts
- o Number of defined budget categories
- o Current checking account balance
- o Next available check number

This will be followed by a month-by-month summary of the disk space used, including number of current entries, maximum number of entries, and utilization percentage. Additionally, the status report will include the number of entries in the 'Prior Year' pseudo month.

Following the listing, the program will prompt the user:

<< PRESS ANY KEY TO CONTINUE >>

Upon pressing any key, the program will return to the Personal Finance Manager's main menu.

## DEFINITIONS (con't)

**YEAR END RESET** - The Personal Finance Manager is capable of actively maintaining data for only a single year. At years end, it is necessary to reset the financial data file for the new year. This reset function will leave all currently defined budget categories and credit accounts unchanged. However, the program will not maintain the financial expenditure and deposits entries. Only those currently unreconciled checks and deposits, which are automatically transferred to the 'Prior Year' pseudo month, are saved for use in the new year. Following execution of the Year End Reset function, the financial data file's storage capacity for each of the 12 months is restored to 200 entries.

**INITIALIZATION MODE** - The program includes an initialization mode that allows the user to select from the two initialization functions (i.e., full data initialization and Year End Reset) and other utility functions. These utility functions are used to set the printer slot number, define the financial data file name, and change the current date.

**BACKUP COPY** - The term backup copy refers to a second copy of a program or file. Potential disasters can be avoided by always having available a recent 'backup' copy of the financial data file contained on the Personal Finance Manager diskette. One section of this manual will provide guidelines and instructions for protecting your financial data by performing periodic backup operations.

**MENU** - A 'menu' is a list of available choices (similar to a restaurant's choice of food). The Personal Finance Manager has one main menu and several other functional menus. These menus allow the user to select available program functions. The items listed in a menu are identified with either a number or the letter 'R'. An example is provided below:

### CHOOSE ONE OF THE FOLLOWING OPTIONS:

- <1> LIST CURRENT CREDIT ACCOUNTS
- <2> CREATE NEW CREDIT ACCOUNT
- <3> CHANGE NAME OF EXISTING CREDIT ACCOUNT
- <4> DELETE EXISTING CREDIT ACCOUNT
- <R> RETURN TO MAIN MENU

The 'R' is always associated with the program function that returns the user to the main menu. The user selects a menu item by simply entering the number (or the letter 'R') corresponding to the function to be performed.

## RUNNING THE PROGRAM

The Personal Finance Manager is supplied on a diskette, complete and ready to run. The user simply boots up the APPLE II DOS (Disk Operating System) in the normal manner as described in the DOS 3.3 documentation. The bootup process will automatically run the program named 'PFM'.

The above booting procedure will work with all allowable configurations except a standard APPLE II computer equipped with the Language System. For this Apple configuration, it is necessary to load Applesoft into the Language System using the following procedures:

1. Boot the DOS 3.3 System Master Diskette
2. Insert the Personal Finance Manager diskette
3. Boot the Personal Finance Manager program by typing: PR#6 followed by a RETURN

The first step taken by the Personal Finance Manager is to locate the financial data file on the diskette, the next action taken will depend on whether or not the file exists.

If the file exists, once the program has located the financial data file, it will check to determine if the file has been damaged (i.e., has the file been overwritten?). If the file is okay the program will continue, otherwise, the following message will appear:

**FINANCIAL DATA FILE HAS BEEN  
DESTROYED OR OVERWRITTEN !!**

**OK TO DELETE AND RE-CREATE FILE?**

If the user responds 'YES' (or 'Y'), then the financial data file will be deleted and then re-created (any previously entered data lost!). Otherwise, the program will terminate.

A 'corrupted' file as reported by the above message could be an indication of a damaged diskette, an improperly functioning disk drive, or tampering with the data file by some other program. This condition could also result from an interrupted (i.e., hitting the RESET key) file initialization process.

## CREDIT ACCOUNT SUMMARY (con't)

Some general comments on credit account summaries:

When computing percentages, any result greater than 999% will be displayed as: >999%

Any credit account total that is negative will be treated as \$0 for computing percentages.

The user is referred to the BUDGET CATEGORY SUMMARY section of this manual for additional notes regarding the graphical display format used by the Credit Account Summary.



#### **CREDIT ACCOUNT SUMMARY (con't)**

##### **SPECIFIC CREDIT ACCOUNT:**

This summary provides a listing of the expenditures made on a specific credit account for each month of the year.

If no credit accounts are currently defined, then the program will respond by displaying the following error message and returning the user to the Credit Account Summary Menu:

##### **NO CREDIT ACCOUNTS DEFINED**

Otherwise, the user will be prompted to select the desired credit account as follows:

##### **ENTER CREDIT ACCOUNT ID ?**

If an invalid credit account ID is entered, an error message will be generated and the user will be again prompted to enter the credit account ID. If a valid credit account ID is entered, the program will generate the Specific Credit Account Summary listing which will include the following monthly and year-to-date data for each month:

- o Total expenditures in the month
- o Expenditures attributed to the credit account
- o Percentage of the total expenditures which can be attributed to the credit account

At the conclusion of the listing, the program will generate the following prompt:

<< PRESS 'G' FOR GRAPHICAL DISPLAY >>  
<< PRESS ANY OTHER KEY TO CONTINUE >>

If any key other than 'G' is pressed, the program will return to the Credit Account Summary Menu.

If a response of 'G' is entered, a bar graph presentation of the monthly expenditures for the credit account will be displayed. A note at the bottom of the graph will indicate the vertical scale of the graph in dollars per tic-mark. The user may then return to the Credit Account Summary Menu by pressing any key.

#### **RUNNING THE PROGRAM (con't)**

If the file does not exist, or a response of 'YES' or 'Y' was entered above, the following will be displayed:

##### **CREATING THE FINANCIAL DATA FILE:**

NAME: PFM.DATAPFILE  
SIZE: 200 ENTRIES/MONTH

(PATIENCE, IT WILL TAKE ABOUT A MINUTE)

The program will then create the file, this process takes about a minute so please be patient.

After the file has been located or created, the user will be asked to enter the current date. Remember, the date input format must be month/day (e.g. 4/14, APRIL/14, etc.). At that point, the Personal Finance Manager is ready to accept user requests and will display its main menu.

If the file was just created, the following message will be displayed at the bottom of the main menu (in inverse video):

##### **FINANCE DATA FILE NOT INITIALIZED**

The user must then request option number #9 (see next section on menu selections) to initialize the data file. If the file has not been initialized, the program will only accept a request for INITIALIZATION (#9) or QUIT (#10). If any other option is selected, the following error message is displayed:

##### **FILE NOT INITIALIZED**

If a valid credit account ID is entered, a caution note will be displayed on the screen and the user will be prompted with:

OK TO DELETE THIS ACCOUNT ?

The caution note reminds the user that deleting a credit account will cause the program to search the entire financial data file, and convert any entry to CASH that is currently assigned to the selected credit account. If a 'N' response is entered, the deletion will not take place. If a 'Y' response is entered, the following message will be displayed:

<< DELETION IN PROGRESS, PLEASE WAIT >>

Upon completion of the account deletion, the program will return to the Credit Account Definition Menu.

When entering commands and data into the program, the following keyboard keys have special functions:

**RETURN** - Used to terminate most input lines. In the data entry and data edit modes, the RETURN key also indicates the end of any input field (e.g., end of amount field, notation field, etc.). In certain situations (described in the following sections), the program will require single character input without the terminating RETURN.

**BACK ARROW (LEFT ARROW)** - Will erase the last character in the current line being inputted.

**ESC** - The ESC key is used to delete the current line being input and start the input over again. The program responds by redisplaying the current prompt message. In the data entry and data edit modes, this key will erase the entire entry line and allow the user to re-enter it.

**CONTROL-P** - This key is used to request a page print. The current contents of the video display will be printed on the line printer. This key should only be used if a printer is available. A page print can be requested at any time, regardless of what is being displayed on the video screen. The program will perform all functions (e.g., "PR" command) necessary to generate the printer output. The user must only make sure that the printer slot is defined (using the INITIALIZATION menu selection), and that the printer is turned on prior to requesting the page print.

When responding to program questions (usually referred to as prompts), many times a default value is assumed by the Personal Finance Manager. This default value will be displayed in INVERSE video and the user may select the default by simply pressing the RETURN key.

Many of the program functions selected by the Personal Finance Manager's main menu also use menus to allow the user to select options. In all these functional menus, one option provided is 'RETURN TO MAIN MENU'. This option is always selected by entering the letter 'R' followed by a RETURN.

The following is a complete description of each main menu selection:

# ENTER DATA

The data entry mode is used to add check, cash or credit card expenditures, and to enter deposits. When this menu item is selected, the program will respond by displaying the standard data entry heading as depicted below:

\*\*\* DATA ENTRY MODE \*\*\*

BAL 923.34

CHECK	NUMB	DATE	NOTATION	AMOUNT	X	ID

The heading shows the current balance and provides column names for each of the fields (e.g., check number, date, etc.) that can be entered. The program will then prompt the user to input a financial entry by placing the flashing cursor at the left most column of the first line below the heading. The user responds by entering each field for the entry being added (expenditures and/or deposits). Each field is terminated by a RETURN. The program will remain in the data entry mode accepting additional data entries until the user requests to return to the main menu. The following describes the required input for each field, remember each field is terminated by a RETURN.

**CHECK NUMBER** - The first field of an entry is the check number field. The user may enter one of the following:

**RETURN** - Pressing just the RETURN key is used to get the next sequential check number. This default check number, which is one greater than the most recently used check number, is displayed at the bottom of the screen.

**NUMBER FROM 1 TO 9999** - The user may enter a specific check number in the range 1 to 9999.

**C** - The letter 'C' is used to indicate a cash entry, the program responds by outputting the word CASH.

**D** - The letter 'D' is used to indicate a checking account deposit entry, the program responds by outputting DEP.

**E** - The letter 'E' is used to enter the data edit mode (described in a later section). This option is only available after at least one entry has been entered and displayed on the screen.

**R** - The letter 'R' is used to return to the main menu. This is the only way to leave the data entry mode and return to the main menu.

# CREDIT ACCOUNT DEFINITION (cont.)

If just the RETURN key is depressed, the program will return to the Credit Account Definition Menu without creating a new credit account.

If the entered credit account ID does not exist, the user will then be prompted to enter the account name which will be associated with the account ID. The account name can be up to 20 characters in length. After entry of the name, the list of current credit account IDs will be updated and the user returned to the Credit Account Definition Menu.

## CHANGE ACCOUNT NAME:

Upon selection of this option, if no credit accounts are currently defined, then the following error message will be displayed and the user returned to the Credit Account Definition Menu:

NO CREDIT ACCOUNTS DEFINED

Otherwise, the user will be prompted to enter the credit account ID. The current credit accounts ID's are displayed at the bottom of the display. Entering just RETURN will cause the program to immediately return to the Credit Account Definition Menu. If an account that is not presently defined is entered, the following error will be displayed:

CREDIT ACCOUNT DOESN'T EXIST

After a valid credit account ID is entered, the user will be asked to enter the new account name. If no change is desired, simply press the RETURN key. If the name is to be changed, the user simply enters the new name followed by a RETURN. Upon completion of the change, the program returns to the Credit Account Definition Menu.

## DELETE CREDIT ACCOUNT:

Similar to the CHANGE ACCOUNT NAME option, the program first checks that at least one credit account is currently defined. Then the program will prompt the user to enter the credit account ID. If an ID that is not on file is entered, the following error message will be displayed:

CREDIT ACCOUNT DOESN'T EXIST

## MAIN MENU

The Personal Finance Manager's main menu will list the possible menu selections. The list of selections will look like the following:

- < 1> ENTER DATA
- < 2> SEARCH/SORT/EDIT DATA
- < 3> RECONCILE CHECK BOOK
- < 4> BUDGET CATEGORY: DEFINITION
- < 5> BUDGET CATEGORY: SUMMARY
- < 6> CREDIT ACCOUNTS: DEFINITION
- < 7> CREDIT ACCOUNTS: SUMMARY
- < 8> STATUS REPORT
- < 9> INITIALIZATION
- <10> QUIT

The program will then prompt the user:

### WHICH OPTION WOULD YOU LIKE ?

The user simply enters the number corresponding to the selection to be performed. The program will then initiate the proper function. It should be noted that the Personal Finance Manager is made up of several program modules. When selecting certain menu items, a small delay may be encountered while the required program module is loaded from the diskette. Each of the menu selections will be described in the following sections of this manual.

It is important to always exit the program via menu selection #10 (QUIT). This guarantees that all entered and edited data has been written back to the diskette.

## CREDIT ACCOUNT SUMMARY

This program function is used to generate two different types of credit account summaries. When this menu item is selected, the program will display the following:

### \*\*\*\*\* CREDIT ACCOUNT SUMMARY \*\*\*\*\*

#### CHOOSE ONE OF THE FOLLOWING OPTIONS:

- <1> SUMMARY OF ALL CREDIT ACCOUNTS  
IN A SPECIFIC MONTH
- <2> SUMMARY OF A SPECIFIC CREDIT  
ACCOUNT FOR THE WHOLE YEAR
- <R> RETURN TO MAIN MENU

#### WHICH OPTION DO YOU WANT ?

The current credit account ID's will be displayed at the bottom of the screen. To select a specific summary, the user simply enters the number (or letter) associated with the function they wish performed.

#### ALL CREDIT ACCOUNTS:

This option produces a summary of all credit account expenditures for a specific month. Upon selection of this option, the program prompts the user with:

#### ENTER MONTH ?

The month may be entered as a number (1-12), or as the first three characters of the name of the month (e.g., MAY). The user may also press just the RETURN key which will default to the current month which is highlighted on the screen.

Upon entry of the month, the program will produce the summary listing. This information will include both monthly and year-to-date total expenditures, and the following data for each credit account:

- o Credit account ID
- o Actual expenditures on the credit account
- o Percentage of total expenditures that can be attributed to the credit account

The user may then return to the Credit Account Summary Menu by pressing any key.

## CREDIT ACCOUNT DEFINITION

This program function is used to list, create, edit, and delete credit accounts. When this menu item is selected, the program will display the following:

\*\*\*\*\* CREDIT ACCOUNT DEFINITION \*\*\*\*\*

CHOOSE ONE OF THE FOLLOWING OPTIONS:

- <1> LIST CURRENT CREDIT ACCOUNTS
- <2> CREATE NEW CREDIT ACCOUNT
- <3> CHANGE NAME OF EXISTING CREDIT ACCOUNT
- <4> DELETE EXISTING CREDIT ACCOUNT
- <R> RETURN TO MAIN MENU

WHICH OPTION WOULD YOU LIKE ?

The currently defined budget category IDs will be displayed at the bottom of the screen. To select a specific credit account definition function, the user simply enters the number (or letter) associated with the function they wish performed.

### LIST CREDIT ACCOUNTS:

When this option is selected, the program will display all the currently defined credit card accounts in the following format:

ID	ACCOUNT NAME
VS	VISA/BANK AMERICARD
MC	MASTER CHARGE

At the conclusion of the list function, the user may return to the Credit Account Definition Menu by pressing any key.

### CREATE CREDIT ACCOUNT:

When this option is selected, the program will verify that there is room for an additional account. If no room is available, then the following error message is displayed and the user is returned to the Credit Account Definition Menu:

ALL 12 ACCOUNTS ALREADY DEFINED

Otherwise, the program will prompt the user to enter the new credit account ID. The ID must consist of two characters and must not be numeric (e.g., '12' is an invalid credit account ID). If the credit account is already on file, the following error will be displayed:

CREDIT ACCOUNT ALREADY EXISTS

## ENTER DATA (con't)

**CREDIT ACCOUNT ID** - The user may enter any of the predefined Credit Account ID's displayed at the bottom of the screen. This indicates that the entry is a credit card expenditure.

**DATE** - The user may respond with any specific date (in the form: month/day) or just RETURN to use the default date. The default date is the date used in the previous entry. For the first entry, the default is the current date.

**NOTATION** - The user may enter up to 14 characters of notation for any type of entry.

**AMOUNT** - The user must enter the amount of the check, cash expenditure or deposit. The program will allow the entry of a negative amount.

**TAX DEDUCTIBLE** - For non-deposit entries only. The user may respond with any character other than a blank to indicate that the current entry is tax deductible. Entering a blank or just RETURN means the entry is not tax deductible. The program will respond by outputting an asterisk for tax deductible entries. As was mentioned in the definition section, this field may be used for any purpose the user desires. One possible alternative is to use this field to flag expenditures that include sales tax.

**BUDGET CATEGORY** - For non-deposit entries only. The user may assign the expenditure to any currently defined budget category by entering the category's ID. Entering blanks or just RETURN will indicate that the entry is not to be assigned to a category. If the entered category ID is not currently defined, then the program will output an error message. A list of currently defined budget category IDs is displayed on the bottom of the screen. Remember to use the special 'CC' budget category for all credit card account payments made by check or cash.

The program will remain in the data entry mode, allowing the user to continue entering expenditure and deposit data. Entering an 'R' in the check number field will cause the Personal Finance Manager to exit the data entry mode and return to the main menu.

## ENTER DATA (con't)

The following are some comments regarding the date entry mode:

As each field is being entered, the program will display a prompt message at the bottom of the screen indicating the name of the field (e.g., DATE), the default value (the user selects the default value by just pressing RETURN), and possible field values (e.g., list of current budget IDs).

The ESC key may be used during the entry of any field to erase the entire current data entry line. This will cause the prompt to return to the check number field, and allows for correction of errors during the data entry process.

Data entries (expenditures and deposits) are stored on disk by month. If there is no more room available for the specified month, then the program will output an error message and will not save the entry on the diskette.

For deposit entries ('D' entered in the check number field), the user will not be prompted to enter the tax deductible and budget category ID fields.

Deposit amounts are displayed in INVERSE video.

INVERSE video is also used to indicate a negative checking account balance.

Always use the special 'CC' budget category for all credit card account payments. This is important. It insures that the monthly expenditure totals do not include both the credit card expenditure and the payment of the credit card bill. Consider the following example. A \$20 dinner bill is paid with the 'MC' credit account and later in the month the credit card bill is with a \$20 check. If the credit account payment was not assigned to the 'CC' budget category, then the program will show an incorrect monthly expenditure total of \$40 (\$20+\$20) instead of the correct \$20 amount.

During the data entry process the program will automatically scroll up the display when there is no more room to show new entries.

## BUDGET CATEGORY SUMMARY (con't)

Some general comments regarding budget category summaries:

When computing percentages, any result greater than 999% will be displayed as: >999%

Any budget category total that is negative will be treated as \$0 for computing percentages.

When the special 'CC' (CREDIT CARD PAYMENTS) budget category is included in either a Monthly Budget Summary or a Specific Budget Category Summary, the program will not display any data for the 'percent of total expenditures' field. This is due to the fact that expenditures assigned to the 'CC' category are not added to the monthly expenditure totals.

The horizontal axis (bottom line) of a graphical display represents the 12 months of the year. The vertical axis (line on left side of the display) is scaled in dollars and is divided by 20 small tic-marks. These tic-marks appear on the right side of the vertical axis. Every 5th tic-mark is identified by a small mark on the left side of the axis. A note at the bottom of the display indicates the scale of the vertical axis, in dollars per tic-mark. This scale will be a multiple of 1, 2, 5, 10, or 100 dollars.

## BUDGET CATEGORY SUMMARY (con't)

If a 'Y' response is entered, the program responds by displaying the year-to-date results for the specified budget category. In this summary listing, all monthly totals and percentages are replaced with year-to-date results. At the conclusion of the year-to-date summary, the program again prompts the user with the following options:

<< PRESS 'M' FOR MONTHLY RESULTS >>  
<< PRESS 'G' FOR GRAPHICAL DISPLAY >>  
<< PRESS ANY OTHER KEY TO CONTINUE >>

The user may also select a LO-RES graphical display by entering a 'G' in response to any of the Specific Budget Category Summary prompts. This bar graph presentation shows the monthly budgets (a white line), and the amount spent in each month. Green indicates below budget spending, and orange indicates that a budget has been exceeded. A note on the bottom of the screen indicates the vertical scale of the display (in dollars per tic-mark). The user may return to the Specific Budget Summary display by pressing any key.

## YEAR END BUDGET REVIEW:

This is the total year budget summation report. The listing provides the following information for each month of the year:

- o Total expenditures in the month
- o Sum of all budget amounts for the month
- o Total spent on all budgets in the month
- o Percentage of all budgets that was actually spent

A final line at the bottom of the listing totals all the above data for the full year.

The summations (total budget amounts and total amount spent on budgets) provided in a Year End Budget Review do not include the special 'CC' (CREDIT CARD PAYMENTS) budget category.

Following display of the Year End Budget Review, the user is prompted:

<< PRESS 'G' FOR GRAPHICAL DISPLAY >>  
<< PRESS ANY OTHER KEY TO CONTINUE >>

The user may press the 'G' key for a graphical display of the Year End Budget Review, or any other key to return to the Budget Category Summary Menu. The graphical display format is identical to that used for the Specific Budget Category Summary (described above).

## SEARCH/SORT DATA

This program option allows the user to set up specific search/sort parameters, and then to list and edit the selected data. Upon selection of this option on the main menu, the following is displayed:

\*\*\* SETUP FOR DATA SEARCH/SORT/EDIT \*\*\*

SELECT ONE OF THE FOLLOWING OPTIONS:

- <1> START THE DATA SEARCH
- <2> SET DEFAULT SEARCH PARAMETERS
- <3> SET SEARCH PARAMETERS
- <R> RETURN TO MAIN MENU, NO SEARCH

WHICH OPTION DO YOU WANT ?

In addition to the selection menu, the lower portion of the screen displays the current search/sort parameters. To select a function, the user simply enters the number (or letter) which corresponds to the function they wish performed.

## START DATA SEARCH:

Upon selection of this option, the program will display the normal data entry heading. The program will then search through all the data on the diskette looking for those data entries that satisfy the specified search criteria. A message on the center of the screen will indicate how many data entries have been found. When the search is through, the data will be sorted if specified by the user. Any time during this search and sort process the user may abort the process and return to the main menu by pressing the ESC key.

Upon completion of the above process, the program will then begin displaying the data. Twelve (12) financial data entries will be displayed at a time. The program will also display a running total of the amounts of all displayed entries. For purposes of this total only, expenditures are considered positive amounts and deposits are considered negative.

If checks and/or deposits are displayed, the program will indicate that an entry has been reconciled by outputting a colon (:) between the check number and date fields. 'Prior Year' entries are identified by displaying the date in inverse video.

The program will display the message <<< END OF LISTING>>> following the display of the last data entry.



#### SEARCH/SORT DATA (con't)

After all data entries have been displayed or after the screen is full, the program will display the following prompt on the bottom of the screen:

R - RETURN TO SEARCH/SORT SETUP  
C - CONTINUE LISTING  
E - ENTER EDIT MODE

Pressing the 'R' key will return the user to the search/sort set up menu without completing the remainder, if any, of the data listing. The user may then set up another data search/sort or may return to the Personal Finance Manager's main menu.

Pressing the 'C' key will cause the program to continue the data listing by displaying the next 12 data entries.

The user may enter the edit mode to edit or modify any of the displayed data entries by pressing the 'E' key. The data edit mode is described in the next section of this manual.

#### SET DEFAULT SEARCH PARAMETERS

This function resets the search parameters to the following default values (i.e., all entries in the current month):

ENTRY TYPE..... ALL ENTRIES  
ENTRY DATE..... MONTH(S): current month  
SPECIFIC BUDGETS ?.. NO  
NOTATION SEARCH ?... NO  
ADDITIONAL CRITERIA. NO  
SORT DATA ?..... NO

#### SET SEARCH PARAMETERS

This function allows the user to modify all search/sort parameters. Upon selection of this option, the program will automatically display the following menus and prompts to allow the user to select the desired search and/or sort parameters:

ENTRY TYPE - The user selects a specific entry type from the following menu:

<1> SPECIFIC CHECK NUMBERS  
<2> DEPOSITS ONLY  
<3> CASH ONLY  
<4> SPECIFIC CREDIT ACCOUNT

#### BUDGET CATEGORY SUMMARY (con't)

If a 'B' is entered, the program responds by displaying the summary results for the additional budget categories.

If a 'Y' response is entered, the program then prints the year-to-date results for the displayed budget categories. In this summary listing, all monthly totals and percentages are replaced by year-to-date results. At the conclusion of the year-to-date summary listing, the program prompts the user as follows:

<< PRESS 'M' FOR MONTHLY RESULTS >>  
<< PRESS 'B' FOR MORE BUDGETS >>  
<< PRESS ANY OTHER KEY TO CONTINUE >>

Again, the user may enter an 'M' or 'B' to select the desired summary listing. If the second group of 12 budget categories are currently displayed, then pressing 'B' will result in redisplay of the first group of 12 budget categories.

#### SPECIFIC BUDGET CATEGORY:

This summary provides information on a specific budget category by month for the whole year. The information provided includes the following data for each month:

- o Total expenditures during the month
- o Monthly amount that was budgeted
- o Percentage of the budget that was actually spent
- o Percentage of the total expenditures that was spent on the specified budget in the particular month

If no budget categories are currently defined, then the program will display the following error message and return to the Budget Category Summary Menu.

#### NO BUDGET CATEGORIES DEFINED

Otherwise, the user will be prompted to enter the desired budget category ID. The program then displays the Specific Budget Summary for the specified budget category. At the conclusion of the summary listing, the following prompt is displayed:

<< PRESS 'Y' FOR Y-T-D RESULTS >>  
<< PRESS 'G' FOR GRAPHICAL DISPLAY >>  
<< PRESS ANY OTHER KEY TO CONTINUE >>

The user responds by pressing a single key. If any key other than 'Y' or 'G' is pressed, then the program returns to the Budget Category Summary Menu.



## BUDGET CATEGORY SUMMARY

The Personal Finance Manager can produce three different types of budget summaries as illustrated in the menu below:

\*\*\*\*\* BUDGET CATEGORY SUMMARY \*\*\*\*\*

CHOOSE ONE OF THE FOLLOWING OPTIONS:

- <1> SUMMARY OF ALL BUDGET CATEGORIES  
IN A SPECIFIC MONTH
- <2> SUMMARY OF A SPECIFIC BUDGET  
CATEGORY FOR THE WHOLE YEAR
- <3> FULL YEAR BUDGET REVIEW
- <R> RETURN TO MAIN MENU

WHICH OPTION DO YOU WANT ?

To select a specific summary, the user must enter the number (or letter) corresponding to the summary desired as displayed on the Budget Category Summary Menu.

### ALL BUDGET CATEGORIES:

This summary produces a listing of all budget categories for a specific month. The summary will indicate the total amount of all expenditures in the month. The summary listing then displays the following data for each budget category:

- o Category ID
- o Budgeted amount
- o Amount spent on the budget
- o Percentage of the budget that was actually spent
- o Percentage of the total expenditures that can be attributed to the specific budget

The user will be prompted to enter the month they wish to have displayed. The month may be entered as a number (1-12), or as the first three characters of the name of the month (e.g., MAY). Pressing just the RETURN key will default to the current month which is highlighted on the screen. The program then displays the Budget Category Summary for the selected month, and upon completion, prompts the user as follows:

<< PRESS 'Y' FOR Y-T-D RESULTS >>  
<< PRESS 'B' FOR MORE BUDGETS >>  
<< PRESS ANY OTHER KEY TO CONTINUE >>

The second line of the above prompt only appears if more than 12 budget categories are currently defined. The user responds by pressing a single key. If a response other than 'Y' or 'B' is entered, the program returns to the Budget Category Summary Menu.

## SEARCH/SORT DATA (con't)

Pressing just RETURN defaults to all entries. If a response of '1' is entered, the program will then prompt the user for the starting and ending check numbers. If the response is a '4', then the user will be asked to enter the desired credit account ID.

ENTRY DATE - The user is then asked to select the desired month(s) from the following menu:

- <1> SPECIFIC MONTHS
- <2> FULL YEAR (ALL 12 MONTHS)
- <3> PRIOR YEAR ENTRIES

Pressing RETURN only defaults to the current month. If the response is 1, the program will prompt the user to enter the starting and ending months of the search. A response of 2 indicates a full year search (i.e., all 12 months, January thru December, but not 'Prior Year' entries). A response of 3 indicates the 'Prior Year' entries, this is the only method available to review the entries maintained in the 'Prior Year' pseudo month.

SPECIFIC BUDGET ID'S - If at least one budget category is defined, the program lists all the currently defined IDs. The user can enter up to four budget category ID's, each separated by a RETURN. A response of RETURN without the prior entry of a budget category ID will default this field to 'NO', which means no budget category search (i.e., any and all budgets are valid). The user can specify all unassigned entries by entering a budget category ID consisting of two blanks.

NOTATION SEARCH ? - The user can enter up to 12 characters of data to be compared with the notation field. A response of just RETURN defaults this field to 'NO', which means the notation field will not be checked during the search. If a notation field search is selected, only those characters entered will be checked (e.g., entering 'A' will find all entries whose notation field begins with the letter A).

ADDITIONAL CRITERIA - The user can elect to select one of the following :

- <1> TAX DEDUCTIBLE ONLY
- <2> UNRECONCILED ONLY
- <3> RECONCILED ONLY

#### SEARCH/SORT DATA (con't)

This selection is made by entering the appropriate number which corresponds to the option desired. A response of just RETURN defaults this criteria to 'NO' which means that this criteria will not be used during the search.

**SORT DATA ?** - The user can elect to have the data displayed in a sequence other than the order in which the data was entered by specifying a sort option. The valid sort options are:

- <1> SORT BY CHECK #
- <2> SORT BY DATE
- <3> SORT BY AMOUNT
- <4> SORT BY BUDGET ID

A response of just RETURN will default the sort criteria to 'NO', which means the data will not be sorted. Data sorted by check number will be in the following order:

1. All credit account expenditures
2. All cash expenditures
3. All checking account deposits
4. Checks, in numerical order

#### RETURN TO MAIN MENU, NO SEARCH

This menu selection allows the user to abort the data search/sort process and immediately return to the Personal Finance Manager's main menu.

Following are some general comments regarding search/sort mode:

An unsorted data listing will display the selected data month by month, with each month's data displayed in the same sequence in which it was entered.

An example of a possible search/sort parameter setup:

```
ENTRY TYPE..... CHECKS: 1-9999
ENTRY DATE..... FULL YEAR
SPECIFIC BUDGETS ?.. YES: FD
NOTATION SEARCH ?... NO
ADDITIONAL CRITERIA. YES: TAX DEDUCTIBLE
SORT DATA ?..... YES: BY AMOUNT
```

This search/sort set up will find all checks for all twelve months that are both assigned to the FD budget, and are tax deductible. Additionally, the generated data listing will be sorted by check amount.

#### BUDGET CATEGORY DEFINITION (con't)

After a valid budget category ID is entered, the user will be asked to enter the new budget name. If no change is desired, simply press the RETURN key. If the name is to be changed, the user must enter the new name followed by a RETURN.

Then the current monthly budget amounts will be displayed, and the user prompted:

#### WANT TO CHANGE MONTHLY \$ BUDGETS ?

A 'Y' response will cause the program to prompt the user to enter the new budget amount for each month. Again, the user may enter a new value or just press RETURN to maintain the current budget amount. This process of editing the budget amounts will continue until all 12 monthly budgets have been edited.

Upon completion of the edit, the program returns to the Budget Category Definition Menu.

#### DELETE BUDGET CATEGORY:

The user will be prompted to enter the budget category ID. If an ID that is not on file is entered, the following error message will be displayed:

#### BUDGET CATEGORY DOESN'T EXIST

The Personal Finance Manager will not allow the user to delete the special 'CC' budget category. If a valid budget category ID is entered, the program responds by displaying a caution note. The user is then prompted with:

#### OK TO DELETE THE BUDGET ?

The caution note reminds the user that deleting a budget category will cause the program to search through the entire financial data file, and unassign all entries currently assigned to the specified budget category ID. If a 'N' response is entered, the deletion will not take place. If a 'Y' response is entered, the following message will be displayed:

#### << DELETION IN PROGRESS, PLEASE WAIT >>

Upon completion of the budget deletion, the user is returned to the Budget Category Definition Menu.

## BUDGET CATEGORY DEFINITION (con't)

### CREATE NEW BUDGET CATEGORY:

Upon selection of this option, the program verifies that there is space available for an additional budget category. If no room exists, then the following error is reported and the user is returned to the Budget Category Definition Menu:

#### ALL 24 BUDGETS ALREADY DEFINED

Otherwise, the program will prompt the user for the new budget category ID. The ID must consist of either one or two characters. Pressing just the RETURN key will return the user to the Budget Category Definition Menu without creating a new budget category. If the entered budget category ID is already on file, the following error will be displayed:

#### BUDGET CATEGORY ALREADY EXISTS

If the budget category ID does not exist, the user will then be prompted to enter the budget name which will be associated with the budget category ID. The budget name can be up to 20 characters in length.

After entry of the budget name, the following prompt will be displayed:

#### SAME \$ BUDGET FOR ALL MONTHS (Y/N) ?

If a 'Y' response is entered, the program will prompt for the budget amount that will be used for all 12 months. If a 'N' response is entered, the user will be prompted to enter the budget amount for each month, beginning with January. Following input of that budget amount, the program will prompt for the following month's until all 12 monthly budgets have been established. The default amount for each month's budget is the amount entered for the previous month.

After all budgets have been entered, the program returns to the Budget Category Definition Menu.

### EDIT BUDGET CATEGORY:

The user will be prompted to enter the budget category ID. The currently defined budget category IDs are displayed at the bottom of the screen. If a budget category that is not currently defined is entered, the following error will be displayed:

#### BUDGET CATEGORY DOESN'T EXIST

## DATA EDIT MODE

The data edit mode can be entered from either the data entry mode or the data search/sort mode. The edit mode is used to alter any of the financial data entries (expenditures and/or deposits) that are currently displayed. The data edit mode also provides the user with the only mechanism within the Personal Finance Manager to delete individual entries from the financial data file.

The user enters the data edit mode by using the 'E' key in response to the prompt in either the data entry mode or data search/sort mode. Upon entering the data edit mode, the program will respond by listing the available edit commands at the bottom of the display. The program will then highlight the first displayed entry by displaying it entirely in inverse video. This highlighted entry line is referred to as the 'selected entry'.

The user may then enter any of the following single key edit mode commands (single key input, no RETURN required):

U - Move the 'selected entry' indicator up one line.

D - Move the 'selected entry' indicator down one line.

E - Edit the 'selected entry'. The user will be prompted to enter each field of the entry being edited. For each field, the user may enter a new value or just RETURN to keep the current field unchanged. This allows the user to be selective and only change those fields requiring modification. For example, a user may wish to change only the budget category ID field. This can be done by entering just RETURN for all fields except the budget category ID field. Once the selected entry has been edited, the program reprompts the user with the data edit mode command list.

ESC - Exit edit mode and return to either the data entry or data search/sort mode.

Some comments regarding the data edit mode:

The user is referred to the ENTER DATA section of this manual for complete descriptions and requirements for each of the data entry fields.

There is one general limitation when using the data edit mode. The user cannot change the month of an entry. All other fields (including the day portion of the date field) may be modified.

#### DATA EDIT MODE (con't)

If the amount field of a reconciled check or deposit entry is changed using the edit mode, then the program will restore the entry to an unreconciled status. Remember that reconciled entries are identified by a colon (:) displayed between the check number and date fields.

The user is only provided limited capabilities when editing a 'Prior Year' entry. The program will only prompt and allow modification of the amount field of a 'Prior Year' entry. Remember, a 'Prior Year' entry is identified by its date being displayed in inverse video.

An existing data entry can be deleted from the financial file using the data edit mode. Entering a dash (-) (also referred to as a minus sign) in the check number field will cause the entry being edited to be permanently deleted from the financial data file. Once a data entry has been deleted from the financial data file, there is no way to recover it except by re-entering the entire entry.

#### BUDGET CATEGORY DEFINITION

This program function is used to list, create, edit, and delete budget categories. When this menu item is selected the program will display the following:

\*\*\*\*\* BUDGET CATEGORY DEFINITION \*\*\*\*\*

CHOOSE ONE OF THE FOLLOWING OPTIONS:

- <1> LIST CURRENT BUDGET CATEGORIES
- <2> CREATE NEW BUDGET CATEGORY
- <3> EDIT EXISTING BUDGET CATEGORY
- <4> DELETE EXISTING BUDGET CATEGORY
- <R> RETURN TO MAIN MENU

WHICH OPTION WOULD YOU LIKE ?

The currently defined budget categories IDs will be displayed at the bottom of the screen. To select a specific function, the user simply enters the number (or letter) associated with the function they wish performed. An attempt to select options #1, 3, or 4 when no budget categories are currently defined will result in the following error message:

NO BUDGET CATEGORIES DEFINED

The following are details for the available Budget Category Definition Menu options:

##### LIST BUDGET CATEGORY:

When this option is selected, the program will prompt:

LIST ONLY A SPECIFIC BUDGET ?

If a 'NO' (or 'N') response is entered, the program will display the current budgets for all budget categories on file. They will be displayed three categories at a time until all have been displayed. The listing may be aborted before all budgets have been displayed by pressing the ESC key.

A 'YES' (or 'Y') response will cause the program to prompt the user to enter the desired budget category ID. If the budget category is not on file, the following error message will be displayed:

BUDGET CATEGORY DOES NOT EXIST

Otherwise, the specified budget category will be displayed. The user may then return to the Budget Category Definition Menu by pressing any keyboard key.

## RECONCILE CHECKBOOK STATEMENT (con't)

The main difference between a permanent and a trial reconciliation is that entries identified as being on the current checking account statement are not posted as reconciled during a trial reconciliation. Thus, if the reconciliation is performed subsequently, these entries will again be displayed as unreconciled entries. Also, service fees are not subtracted permanently from the PPM's balance during a trial reconciliation. However, any changes made to an entry amount (using the reconciliation mode's edit feature) will be posted permanently to the disk regardless of the reconciliation mode.

## RECONCILE CHECKBOOK STATEMENT

The reconciliation process is used to verify the current checkbook balance maintained by the Personal Finance Manager with the statement from the bank. Once this function is selected, the program will prompt the user with:

### IS THIS A TRIAL RECONCILIATION ?

If the user only wants to see the effects and not update the file during the reconciliation process, a 'Y' response should be entered. Otherwise, an 'N' response should be entered which will cause the reconciliation process to be permanent (i.e., the disk based financial data file will be updated as a result of the reconciliation).

After the prompt has been answered, the program will display the normal heading used for data entry. The program will then search through all the data on the diskette (including all 'Prior Year' entries), displaying all checks and deposits that have not been previously permanently reconciled. As each data item is displayed, the user responds with one of the following single key inputs (no RETURN required):

Y - Indicates that the check or deposit does appear on the current bank statement. The program will respond by outputting 'ON STATEMENT' in the notation field.

N - Indicates that the displayed check or deposit does not appear on the current bank statement. The program will respond by outputting 'OUTSTANDING' in the notation field in inverse video.

E - This option allows the user to edit the dollar amount associated with the data entry just displayed. The program responds by moving the screen cursor to the amount field of the displayed entry. The user may then enter a new amount. To leave the current amount unchanged just press RETURN. The program then reprompts the user for the normal reconciliation response.

ESC - This is used to abort the reconciliation process. The program will go through the data file and find all checks and deposits that were just reconciled. It will restore all that data to the unreconciled state. This is the only way to terminate the reconciliation process in case of an entry error (e.g., responding 'Y' to an entry that does not on the current statement).

The reconciliation process will continue until aborted by the user (with the ESC key) or until all unreconciled entries have been displayed.

# RECONCILE CHECKBOOK STATEMENT (con't)

After displaying all unreconciled entries, the program will prompt the user to enter any checking account service fee charged by the bank. The user responds with the amount, if any. The program will then immediately subtract this amount from its checking account balance. If no fee is charged, the user may respond with just RETURN.

The program will then ask the user to enter the ending balance from the bank statement. Once entered, the program will compare this amount with its balance, taking into account all outstanding checks and deposits and then display the following reconciliation summary:

## RECONCILIATION SUMMARY:

# REMAINING UNRECONCILED ENTRIES =	14
STATEMENT ENDING BALANCE =	190.14
CURRENT PFM BALANCE =	256.98
- OUTSTANDING DEP'S=	150.00
+ OUTSTANDING CHK'S=	120.00
PFM CALCULATED BALANCE =	226.98
DIFFERENCE BETWEEN BALANCES =	36.84

At the end of the reconciliation summary, the program will output one of the following messages:

CHECKBOOK BALANCES EXACTLY  
ERROR: PFM BALANCE TOO HIGH  
ERROR: PFM BALANCE TOO LOW

The first message indicates that the two balances (PFM's and the bank's) are identical. The last two messages indicate that an error was detected. The amount of the discrepancy is indicated on the line labeled: DIFFERENCE BETWEEN BALANCES. If a balance error is reported, it is the users responsibility to uncover the source of the error. Most likely a check or deposit amount was entered incorrectly. Errors in check and/or deposit amounts may be fixed with the edit mode of either the 'DATA SEARCH/SORT' or 'RECONCILE CHECKBOOK' modes.

# RECONCILE CHECKBOOK STATEMENT (con't)

If a trial reconciliation was requested and no error in the balances was detected, then the user will be given a second opportunity to make the reconciliation permanent. The Personal Finance Manager will display the following prompt.

## THE TRIAL RECONCILIATION WAS SUCCESSFUL WANT TO MAKE IT PERMANENT ?

If the user responds with 'YES' (or 'Y'), then the program will make the reconciliation permanent by posting the results to the diskette.

Following completion of the reconciliation, the user returns to the Personal Finance Manager main menu by pressing any keyboard key.

Some general comments on checkbook reconciliation follow:

For checks that were entered more than once (e.g., to allow proper budget assignment), make sure that you provide the same answer, either 'Y' (on statement) or 'N' (outstanding), to all entries using the same check number.

If you make an error during reconciliation (e.g., answering 'Y' to an entry that does not appear on the statement), then use the ESC key to abort the reconciliation process. The reconciliation can be restarted by selecting the proper main menu option.

Checking account service charges and fees may be handled in two ways:

1. Respond to the program prompt during reconciliation
2. Make separate program entries for the fee amount (e.g. using special check numbers)

The first method is the simplest, however, the program will immediately subtract this amount from the balance and no permanent record is maintained of the fee amount. The second method requires making data entries, but does allow the user to maintain records of the fees charged (in fact a budget category could be used to monitor the amount month to month). One suggested approach is to use check numbers greater than 9000 for the various fees charged by the bank (e.g., use 9999 for monthly service charges, 9998 for check printing fee, etc.)